

ST-600 Series

Inline Disinfection Sensors

The Pyxis ST-600 inline probe measures the mass/mass concentration of bleach (sodium hypochlorite) and ST-601 measure the concentration of Chlorine dioxide (ClO₂).

Unlike disinfection sensor based on an amperometric approach for disinfection liquids in ppm level, ST-600 / 601 applies optical method and directly measures the optical density of the bleach / ClO₂ solution in percentage level without dilution.

The probe applies using a near UV light as major light source and also a built-in reference light source and a reference light detector in addition to the main light source and main light detector. This configuration ensures long-term stable measurement of the bleach concentration.

Typical Applications

- Bio-control for industrial water
- Industrial Oxidizer Generation (ie. hypochlorite / monochloramine)
- Swimming pool and SPA
- Hospital

Features

- Break-through technology to measure disinfection liquids in high concentration, without dilution or reagent
- Long maintenance and calibration cycle – 6 months typical
- The probe can be conveniently connected to the suction or discharge side of the bleach pump tubing with using a union or a quick push-in connector.
- Can be calibrated with a PC or smart phone app via a Bluetooth/WiFi adaptor.
- Diagnostic information (probe tubing fouling and failure modes) can be communicated to digital displays via Modbus RTU.



Inline Bluetooth Adapter (P/N: MA-WB)

Connect any Pyxis inline sensor to computers or Smartphones with uPyxis app via Bluetooth connection to read, calibrate, diagnose, and set up.



Specification

	ST-600	ST-604	ST-601
Target	Sodium hypochlorite	Sodium hypochlorite	Chlorine dioxide
Range	0-16 % (mass/mass)	0-2 % (mass/mass)	0.0 – 0.35% (mass/mass)
Resolution	0.01 in percentage	0.01 in percentage	0.01 in percentage
Accuracy	±2% of reading or 0.1 percentage, whichever is greater	±2% of reading or 0.1 percentage, whichever is greater	±2% of reading or 0.05 percentage, whichever is greater
Method	UV Absorbance		
Power Supply	22-26V DC, Power Consumption ~1W		
Outputs	Isolated 4-20mA Analog Output Isolated RS-485 Digital Output, Supporting MODBUS protocol		
Dimension	Length 6.8 inch, body diameter 1.44 inch		
Weight	0.37 pounds		
Installation	7 mm OD Teflon tubing for measurement flow Customized ¾" tee in PVC also available when ordering		
Material	CPVC		
Pressure	Up to 100psi		
Temperature	Operation 40-120 °F, Storage 20~140 °F		
Cable Length	5 feet, terminated with IP67 connectors. 30 feet, 60 feet extension cables available		
Calibration	Two-point calibration against standard solutions		
Rating	IP66		
Regulation	CE marked		

Order Information

Model: ST-600 Inline Bleach Sensor (0-16%)

P/N: 50213

Model: ST-604 Inline Bleach Sensor (0-2%)

P/N: 50219

Model: ST-601 Inline ClO₂ Sensor (0-3,500ppm)

P/N: 50214

Model: WiFi / Bluetooth Adaptor

P/N: MA-WB

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